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ABSTRACT

The purpose of this study was to investigate the role of instructional and educational technology related to planning, delivery, evaluation, and content selection. Also under investigation were the internal organizations of universities that sponsor and deliver faculty development, and where the ultimate responsibility for faculty development lies. Two types of questionnaires were designed and used in the study, and three types of respondents were surveyed. The sample was the 170 U.S. colleges and universities included in "Masters Curricula in Educational Communications and Technology: A Descriptive Directory," by Jenny Johnson, et al., 1989. Participants in the study were media services directors, department heads of instructional technology academic programs, and the person in the institution responsible for the faculty development program. Questionnaires solicited information on the subjects' perceptions of faculty development at their institutions, campus organizations and departments offering faculty development workshops, and types of workshops offered with instructional technology content. Results indicate that: (1) many departments and committees on campus provide teacher workshops designed to enhance professional development; (2) most of the workshops are administered through a faculty development office or academic affairs office; (3) most of the workshops focused on use of microcomputers and computer technology; and (4) instructional design principles such as needs assessment and evaluation are under utilized. (9 references) (DB)

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Introduction

Faculty development is an issue at most institutions of higher education (Alfonsi,1990). An increasing knowledge base in most disciplines, a more culturally diverse student body, more stringent retention, tenure and promotion requirements, an increased interest in faculty evaluation, and a demand for alternative modes of instruction have fostered and even demanded interest in faculty development programs (see Diehl and Simpson, 1989; Berman and Skeff, 1989; American Association of University Profoessors, 1990). Alternative modes of instruction have begun inroads on the traditional method of content delivery--the lecture. These modes of instruction often emphasize instructional technology--both in design and planning and in delivery (University of Maryland, 1984).

Faculty, too often, are poorly trained in educational methods and the newer technologies of instruction. Instructional technologists by their nature and training are often proactive and tend to take a lead in programs aimed at change--especially in the areas of instruction. Many workshop and seminar offerings in faculty development (FD) programs are presented by instructional technologists and include content related to instructional technology (Marbler and Lawyer, 1984; Albright, 1989).

Purpose of Study

The purpose of this study is to investigate the role of instructional technology (IT) related to planning, delivery, evaluation and content selection. We want to investigate what internal organizations of the university sponsor and deliver FD offerings and where the ultimate responsibility of the FD program lies. We wish to determine the types of offerings related to IT and their relative frequency and attendance. Answers to questions related to planning, evaluation, and effect on instruction and faculty growth and involvement are sought.

Methodology of Study

Two types of questionnaires were designed and used in this study. Three types of respondents were surveyed. The sample was the 170 USA colleges and universities included in **Masters Curricula in Educational Communications and Technology: A Descriptive Directory** by Johnson, et al, 1989. Each of these institutions was identified as having either MA or Ph.D. programs in educational communications and technology. Since the major emphasis of this Faculty Development study was related to instructional technology it seemed logical that having an academic program in educational communications and technology would have some effect on the planning, development, and evaluation of such programs and on the curricular content of the FD program.

The subjects participating in this study were media services directors, department heads of instructional technology academic programs and the person in the institution responsible for the faculty development program (FD officer). Three color-coded questionnaires were sent to the chief academic officer who was requested to see that the appropriate persons received them. The questionnaires directed to the media services directors and IT academic head were the same and requested the perceptions of these subjects concerning eleven statements relevant to the FD program at their institution. The questionnaire directed to the institution's FD officer included these same items, but additional data was requested related to campus organizations and departments which offered FD workshops/seminars and administrative responsibility, types of workshops/seminars offered with instructional technology content and programmatic planning.

The eleven statements to which the respondents reacted related to planning, evaluation, input, support, impact, promotional activities, resources and the role of instructional technologists in faculty development. A semantic differential was used which included Strongly Agree, Agree, Agree Slightly, Disagree Slightly, Disagree, and Strongly Disagree. The responses of these three types of subjects were statistically compared by computing the Average Weighed Value and then using a Rank Difference Correlation (Spearman rho).

A Previous Study

Some data from a similar study (Stephens, 1991), reported at the 1991 Association for Educational Communications and Technology conference in Orlando, are incorporated into this study. The present study was done as a follow-up using the same institutions surveyed in 1990. In the first study, a survey instrument was sent to the person listed as being the chair of the program offering masters or doctoral degrees in educational communications and technology. One hundred and twenty-four institutions responded. In the latter study, the number of institutions responding is an unknown, because three different types of respondents were surveyed--the FD officer, the director of educational media services, and the academic head of the IT program. At least 65 institutions responded, but the actual number is probably more as no institution identifying code was used. A color code, however, was used to delineate the type of respondent. Sixty-five FD officers, 56 directors of media service centers (IRC), and 47 heads of IT academic programs responded.

Findings

Administrative Responsibility

In the 1990 study, with 124 institutions responding, the majority of offices contributing to faculty development were the Faculty Development Office (30), the IRC (28) and the Office of Academic Affairs (31). In most cases, Academic Affairs was ultimately responsible for FD programs. In the 1991 study, with data being provided by the designated FD officer, the data reflected a similar pattern (see **Table 1**) with responsibility residing in the FD Office and the Academic Affairs Office.

UNIVERSITY ORGANIZATIONS OFFERING FD WORKSHOPS				
		FREQUENCY		RESPONSIBILITY
ORGANIZATION				
FD Office		25		13
IT Academic		17		
Other Academic		11		
Sci.		18		
Computer Sci.		7		
Info. Tech.		24		
School of Educ.		13		
HRD		18		
Acad. Affairs		42		24

Table 1. Administrative Responsibility for Faculty Development Programs.

Faculty Development Offerings and Attendance

The 1990 study provided more data related to numbers of workshops/seminars and attendance than the 1991 study. But the trends are similar. The earlier study compared instructional design-related offerings, media design/use offerings, and any workshop/seminar related to computer technology. The latter study had five categories--instructional design, media design/use, computers, interactive technologies, and alternative modes of instruction. **Table 2** provides data on attendance which is also graphically displayed in **Figure 1**. By eliminating Alternative Modes and combining Computers and Interactive Technologies for 1991, converting attendance values to percentages and then comparing 1990 with 1991 we can see in **Figure 2** that Media Design/Use is declining, Instructional Design is increasing and that Computer Technologies are in the majority of FD offerings related to instructional technology.

ATTENDANCE AT FD WORKSHOPS/SEMINARS					
	INSTRUCTIONAL DESIGN	MEDIA PROD./SEL.	COMPUTER USES	HYPERMEDIA/ INTERACTIVE	ALTERNATIVE MODES
ATTENDANCE	783	337	952	420	530
%AGE OF TOTAL	36	16	44	19	25

Table 2. Attendance at FD Workshops and Seminars.

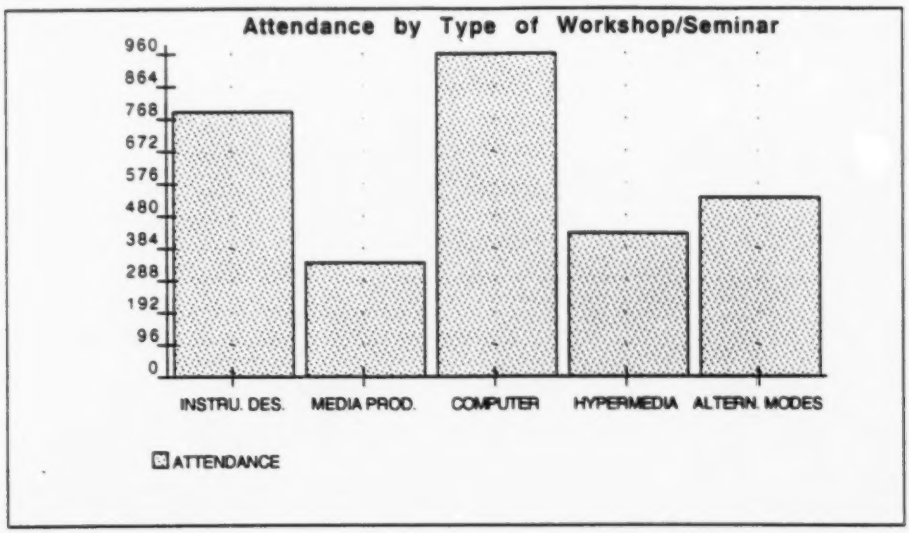

Figure 1. Graphic Comparison of Attendance at FD Workshops

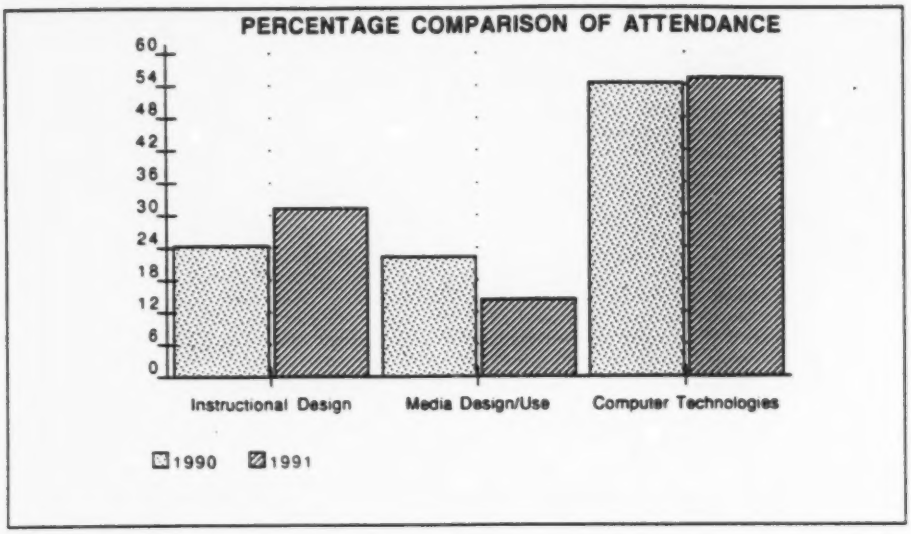

Figure 2. Percentage Comparison of Attendance

Programmatic Planning and Evaluation

A caveat of instructional technology and design is that planning and evaluation are a part of any program development activity. The data provided by faculty development officers from 65 institutions was disappointing in that regard. However, faculty input into program development was an encouraging factor. Only 34 % of the institutions responding indicated that formal needs assessment procedures were used in programmatic planning. Even more distressing was that only 26 % had a formalized program evaluation system. And 43 % reported that a formal University policy existed concerning faculty development. On the other hand all respondents as a group indicated that Academic Administration policy strongly supports faculty development. The data regarding programmatic planning is summarized in **Table 3**.

FD PROGRAMMATIC PLANNING				
	Yes	%	No	%
Is there a FD program planning committee?	35	54.00%	30	46.00%
Is formal needs assessment a part of planning?	22	34.00%	43	66.00%
Does the faculty participate in planning?	42	65.00%	23	35.00%
Is there a formalized program evaluation system?	17	26.00%	48	74.00%
Is there a formalized University policy concerning FD?	28	43.00%	37	57.00%

Table 3. Faculty Development Programmatic Planning.

Perceptions of Respondents

Each type of respondent was asked to react to the same eleven statements related to the FD program at his/her institution. Their responses were remarkably similar. After calculating the Average Weighted Mean for each group of respondents on each item a Rank-Difference Correlation (Spearman rho) was computed comparing IT department heads perceptions with media services directors and with FD officers. Then media service directors were compared with FD officers. In each case there was an extremely high positive correlation among their cumulative responses. This data is summarized in **Table 4.**

RANK-DIFFERENCE CORRELATION AMONG RESPONDENTS' PERCEPTIONS	
1.	IT Academic Head Correlation with FD Officer r = .8636 Extremely positive correlation.
2.	IT Academic Head Correlation with IRC Director r = .829 Extremely positive correlation.
3.	FD Officer Correlation with IRC Director r = .784 Very Positive Correlation

Table 4. Summary of a Rank-difference Correlation Among Respondents' Perceptions.

The Average Weighted Value for the responses of each group of subjects is presented in Tables 5 through 7. **Table 5** refers to Faculty Development Officers' perceptions about the FD program. These subjects have the perception that there is a shortage of supporting resources, that needs assessment does not play a significant part in planning, that there is no effective evaluation plan, that participation in FD does not strongly affect promotion and tenure, and that instructional technologists play only a minor role in the Faculty Development Program. There is remarkable agreement on these points among all three types of respondents.

FD Officers most strongly supported the concept that Academic Administration policy supports the FD program. They also believed that the program had a positive impact on quality of instruction and that faculty were solicited for input. IRC Directors and IT Department Heads disagreed with FD Officers in more strongly agreeing with the concept that needs assessment is an important tool in planning the FD program. However, IRC Directors, as a group, did not feel in agreement with IT Department Heads and FD Officers that the FD program was having a positive impact on instruction.

Conclusions, Implications, and Recommendations

Conclusions that may be made based on the findings of this study are:

1. Many departments and committees on campus provide workshops/seminars that are designed to assist faculty in learning or improving professional skills.

Responses of Faculty Development Officers: Average Weighted Value

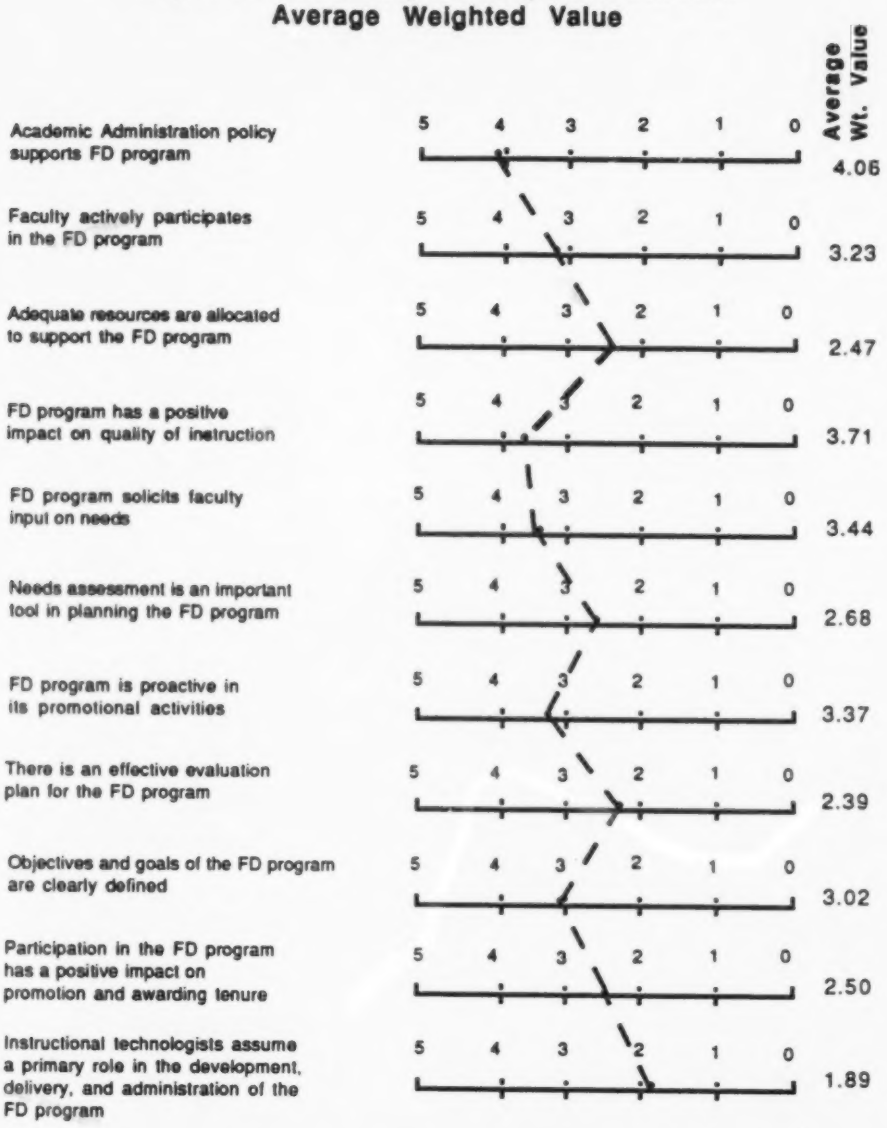
Average Wt. Value
Academic Administration policy supports FD program
4.06
Faculty actively participates in the FD program
3.23
Adequate resources are allocated to support the FD program
2.47
FD program has a positive impact on quality of instruction
3.71
FD program solicits faculty input on needs
3.44
Needs assessment is an important tool in planning the FD program
2.68
FD program is proactive in its promotional activities
3.37
There is an effective evaluation plan for the FD program
2.39
Objectives and goals of the FD program are clearly defined
3.02
Participation in the FD program has a positive impact on promotion and awarding tenure
2.50
Instructional technologists assume a primary role in the development, delivery, and administration of the FD program
1.89

Table 5. Average Weighted Value of Faculty Development Officers' Perceptions.

2. Most often, the faculty development program is either administered through the FD Office or through the Academic Affairs office. Ultimately, all such activities are accountable to the Academic Affairs office.

3. The majority of workshop/seminars offered which relate to instructional technology are involved with computer technology.

4. Workshops related to media design and use are on the decline.

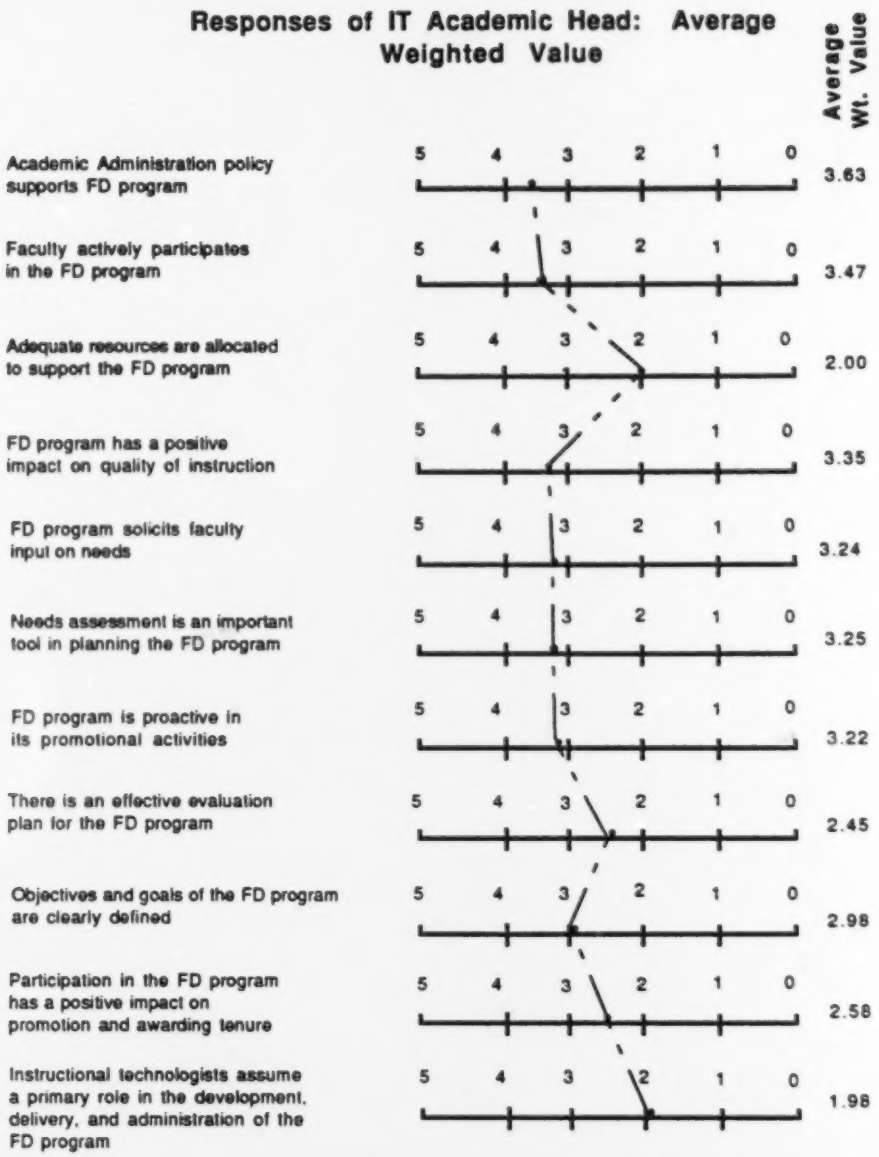
Responses of IT Academic Head: Average Weighted Value
Average Wt. Value
Academic Administration policy supports FD program
3.63
Faculty actively participates in the FD program
3.47
Adequate resources are allocated to support the FD program
2.00
FD program has a positive impact on quality of instruction
3.35
FD program solicits faculty input on needs
3.24
Needs assessment is an important tool in planning the FD program
3.25
FD program is proactive in its promotional activities
3.22
There is an effective evaluation plan for the FD program
2.45
Objectives and goals of the FD program are clearly defined
2.98
Participation in the FD program has a positive impact on promotion and awarding tenure
2.58
Instructional technologists assume a primary role in the development, delivery, and administration of the FD program
1.98
5 4 3 2 1 0

Table 6. . Average Weighted Value of IT Department Heads' Perceptions

5. Instructional design principles such as needs assessment and evaluation in programmatic planning of faculty development programs are underutilized.

6. There is remarkable agreement among the three groups of subjects with a strong positive correlation on the perceptions about the eleven statements used to describe the faculty development program.

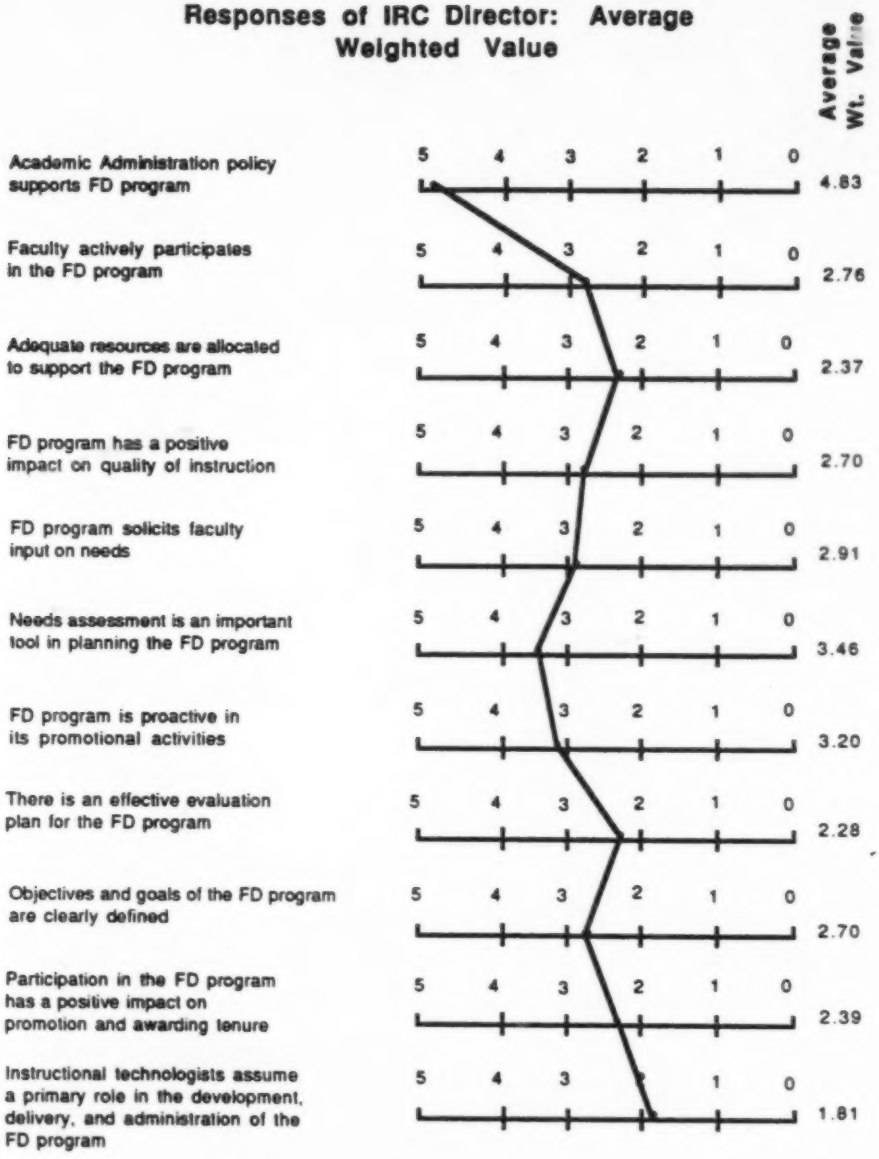
Responses of IRC Director: Average Weighted Value
Average Wt. Value
Academic Administration policy supports FD program
4.83
Faculty actively participates in the FD program
2.76
Adequate resources are allocated to support the FD program
2.37
FD program has a positive impact on quality of instruction
2.70
FD program solicits faculty input on needs
2.91
Needs assessment is an important tool in planning the FD program
3.46
FD program is proactive in its promotional activities
3.20
There is an effective evaluation plan for the FD program
2.28
Objectives and goals of the FD program are clearly defined
2.70
Participation in the FD program has a positive impact on promotion and awarding tenure
2.39
Instructional technologists assume a primary role in the development, delivery, and administration of the FD program
1.81
5 4 3 2 1 0

Table 7. Average Weighted Value of IRC Directors' Perceptions.

It may be implied that instructional technologists and instructional design principles are being under utilized in the development, administration, and delivery of faculty development program offerings. The implications of this indicate a need for a more proactive stance from instructional technologists in participation in the FD program. In addition, these professionals need to develop greater visibility on campus in their modeling of good teaching and helping others increase their productivity through technology.

It is recommended that a more comprehensive study be made related to faculty development with on-site visits cooperatively working with appropriate campus personnel and

carefully monitoring the FD program regarding planning activities, needs assessment, evaluation and kinds and numbers of workshops with attendance figures. Standards should be developed by which Faculty Development programs can be evaluated and model programs recognized. What makes an effective program? What can be done to ensure that the program remains effective?

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